**Amendment and Response**
Applicant(s): HANSON et al.
Serial No.: 09/814,252
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For: PRIMERS FOR USE IN DETECTING BETA-LACTAMASES

## Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1-10. (canceled)

11. (previously presented) A primer selected from the group of:

5' - CTC GAT GAT GCG TGC TTC GC - 3' (SEQ ID NO:32);

5' - GCG ACT GTG ATG TAT AAA CG - 3' (SEQ ID NO:33); and full-length complements thereof.

12-16. (Canceled)

17. (withdrawn - currently amended) A method for identifying a PSE1, PSE4, or CARB3 family beta-lactamase within a Gram Negative organism in a clinical sample, the method comprising:

providing a pair of oligonucleotide primers, each having 15-35 nucleotides, specific for nucleic acid characteristic of the PSE1, PSE4, and CARB3 beta-lactamase enzymes, wherein one primer of the pair is complementary to at least a portion of the beta-lactamase nucleic acid in the sense strand and the other primer of each pair is complementary to at least a portion of the beta-lactamase nucleic acid in the antisense strand;

annealing the primers to the beta-lactamase nucleic acid;

simultaneously extending the annealed primers from a 3' terminus of each primer to synthesize an extension product that is complementary to the nucleic acid strands annealed to each primer wherein each extension product after separation from the beta-lactamase nucleic acid serves as a template for the synthesis of an extension product for the other primer of each pair;

separating the amplified products; and

analyzing the separated amplified products for a region characteristic of the beta-lactamase; wherein the primers are selected from the group of:

5' - CTC GAT GAT GCG TGC TTC GC - 3' (SEQ ID NO:32);

5' - GCG ACT GTG ATG TAT AAA CG - 3' (SEQ ID NO:33); and full-length complements thereof.

18-37. (canceled)

38. (canceled)

39-55. (canceled)

56. (currently amended) A diagnostic kit for detecting a PSE1, PSE4, or CARB3 family beta-lactamase within Gram Negative bacteria [organisms] which comprises packaging, containing, separately packaged:

(a) at least one primer pair capable of hybridizing to a beta-lactamase nucleic acid characteristic of the PSE1, PSE4, and CARB3 families of beta-lactamase enzymes, wherein each primer of the pair includes 15-35 nucleotides;

(b) a positive and negative control; and

(c) a protocol for identification of the beta-lactamase nucleic acid characteristic of the PSE1, PSE4, or CARB3 families of beta-lactamase enzymes;

wherein at least one of the primers is selected from the group consisting of:

5' - CTC GAT GAT GCG TGC TTC GC - 3' (SEQ ID NO:32);

5' - GCG ACT GTG ATG TAT AAA CG - 3' (SEQ ID NO:33); and full-length complements thereof.

57. (canceled)